BULLETIN No. 12

OF THE

CALIFORNIA STATE MINING BUREAU,

A. S. COOPER, STATE MINERALOGIST.

SHOWING BY COUNTIES THE MINERAL PRODUCTIONS OF CALIFORNIA FOR THE YEAR 1896.

COMPILED BY CHARLES G. YALE, STATISTICIAN.
(FROM DIRECT RETURNS BY PRODUCERS.)

COUNTIES.	METALLIC. Precious Metals (as per returns to U. S. Mint at S. F.) Gold. Value.	Silver. Value.	Chrome and Mineral Paint. Tons.	Value.	Quicksilver. Flasks.	Value.	Miscellaneous. Antimony, Copper, Lead, Manganese, and Platinum. Quantity.	Value.	NON-METALLIC. Borax. Tons.	Value.	Coal. Tons.	Value.	Mineral Waters. Gallons.	Value.	Salt. Tons.	Value.	Miscellaneous. Gypsum, Magnesite, and Soda. Tons.	Value.
Alameda							Tons 318	Manganese. $3,415 00							55,826	$122,810		
Alpine	$400 00																	
Amador	1,523,351 28	$3,767 74					Lbs. 30,000	Copper. 3,000 00			19,775	$29,662						
Butte	749,316 08	5,389 80											1,900	$775				
Calaveras	1,546,398 85	500 00					Lbs. 87,557	Copper. 8,990 00										
Colusa					(c) 58	$2,054							50,090	12,530				
Contra Costa											44,892	118,709	7,600	3,700				
Del Norte	24,150 00																	
El Dorado	812,289 26	533 96																
Fresno	28,235 00	99 60											1,200	400			50	Gypsum. $400
Humboldt	65,092 85												15,000	10,000				
Inyo	238,507 22	108,619 26					Lbs. 1,220,000	Lead. 36,600 00	249	$24,900							3,000	Soda. 65,000
Kern	590,866 72	34,649 63					Tons 15	Antimony. 2,250 00										
Lake					6,307	232,484							65,920	32,460				
Lassen	40,300 00																	
Los Angeles	35,468 55																960	Gypsum. 9,180
Madera	104,339 84	1,240 00																
Marin																		
Mariposa	335,637 33	180 11																
Mendocino																		
Merced	1,250 00																	
Mono	[illegible]	[illegible]					Lbs. 73,500	Lead. 7,205 00										
Monterey													5,000	1,000				
Napa					11,411	403,031							218,680	81,335			1,500	Magnesite. 11,000
Nevada	2,380,756 13	8,584 29					Lbs. 28,200	Copper. 2,820 00										
Orange																		
Placer	1,674,844 30	6,690 25																
Plumas	462,526 57	83 04																
Riverside	262,800 00	13,450 00									4,982	9,964			4,317	8,634		
Sacramento	133,050 00																	
San Benito					1,335	46,725	Tons 2	Antimony. 70 00					5,000	300			300	Gypsum. 3,000
San Bernardino	96,722 76	130,714 04							6,505	650,500					3,000	15,000		
San Diego	560,578 00	40 00											45,000	35,000	600	4,800		
San Francisco																		
San Joaquin																		
San Luis Obispo	3,000 00		200	Chrome. $2,000	101	3,400												
San Mateo																		
Santa Barbara	8,592 00						Ozs. 12	Platinum. 44 00					31,500	20,300				
Santa Clara					6,222	211,570							44,000	18,800				
Santa Cruz																		
Shasta	599,209 91	24,233 68					Lbs. 1,847,087	Copper. 184,708 70										
Sierra	786,174 57	423 70																
Siskiyou	1,091,264 82	652 65																
Solano													3,094	1,547				
Sonoma			(a) 220	Min. P'nt. 3,740	1,126	37,150							14,400	19,287				
Stanislaus	16,635 00		(b) 17	Min. P'nt. 1,800														
Tehama			56	Chrome. 475														
Trinity	1,296,330 30				4,205	139,035												
Tuolumne	1,070,141 81	328 32																
Tulare	20,092 00																	
Ventura																		
Yolo																		
Yuba	171,687 77																	
Unapportioned (k)			530	Chrome. 5,300			Ozs. 150	Platinum. 900 00			1,000	3,000	300,000	100,000	1,000	2,000		
Totals	$17,181,562 70	$422,463 60		$13,315	30,765	$1,075,449		$2,245,002 70	6,754	$675,400	70,649	$161,335	808,384	$337,434	64,743	$153,244		$88,580

Total value Precious Metals, $17,604,026 30. Total value Metallic Substances, inc. Precious Metals, $18,927,793 00. Total value Non-Metallic Substances, $1,415,993.

COUNTIES.	HYDROCARBONS AND GASES. Asphaltum, Bituminous Rock, and Natural Gas. Quantity.	Value.	Petroleum. Bbls.	Value.	STRUCTURAL MATERIALS. Clays and Hydraulic Cement. Quantity.	Value.	Granite. Cubic Feet.	Value.	Limestone. Lime. Bbls.	Value.	Stone. Tons.	Value.	Macadam. Tons.	Value.	Rubble Rock and Paving Blocks. Quantity.	Value.	Miscellaneous. Marble, Onyx, Sandstone, Serpentine, and Slate. Quantity.	Value.
Alameda					M (g)7,000	Brick. $35,000							86,885	$69,405				
Alpine																		
Amador					Tons 8,413	Pottery. 27,825											Cu. ft. 4,389	Marble. $5,415
Butte																		
Calaveras																		
Colusa																		
Contra Costa					1,400 tons	Pottry $2,200							9,000	9,000				
Del Norte					180 M	Brick 4,500												
El Dorado									4,413	$4,158							Squares 500	Slate. 2,500
Fresno			14,119	$56,750														
Humboldt															Tons (i)174,220	Rubble. $233,454		
Inyo																	Cu. ft. 3,000	Marble. 24,000
Kern	Tons. 2,484	Asphaltum. $44,680	(f) 235	235					37,100	32,329	(h)5,000	$5,000						
Lake																		
Lassen																		
Los Angeles			953,734	812,800	M 27,478	Brick. 179,290							33,000	30,000			Cu. ft. 1,500	Serpentine. 6,000
Madera							48,628	$73,525							Tons 15,600	Rubble. 7,800		
Marin					M 15,000	Brick. 85,000							6,119	6,530	Tons 1,730	Rubble. 1,730		
Mariposa																		
Mendocino																		
Merced																		
Mono									500	2,000							Cu. ft. 3,000	Calif. Onyx. 24,000
Monterey																		
Napa																		
Nevada																		
Orange																		
Placer					Tons 10,000	Pottery. 10,000	41,995	41,416							Tons 7,000	Rubble. 2,800		
Plumas																		
Riverside					Tons 22,019	Pottery. 22,750	15,000	10,000	15,000	15,000	6,000	6,000	8,000	7,000				
Sacramento					M 8,700	Brick. 44,200							46,875	11,718	Tons 750	Rubble. 300		
San Benito									40,000	35,000			12,000	6,000				
San Bernardino					Bbls. 9,000	Cement. 27,000	8,933	12,476	37,427	34,977	17,500	17,500			(j) 350 M 5,000 tons	Pav. Blks. $14,000 Rubble 2,000	Cu. ft. 500	Marble. 3,000
San Diego															Tons 1,688	Rubble. 3,573		
San Francisco					M 5,000	Brick. 37,500							262,767	244,592	Tons 49,265	Rubble. 40,575		
San Joaquin					M 7,000	Brick. 35,000												
San Luis Obispo	Tons. 5,113	(d) Natural Gas. 85,157 Bit. Rock. 11,464													Tons 28,720	Rubble. 17,407		
San Mateo			1,000	1,250	Bbls. 500	Cement. 1,250												
Santa Barbara	Tons. 18,430	Asphaltum. 317,010 (e) Natural Gas. 1,300	39,792	35,813													Cu. ft 5,000	Sandstone. 500
Santa Clara			900	1,145	M 15,000	Brick. 80,000					500	600	5,000	5,000				
Santa Cruz	Tons. 43,843	Bit. Rock. 109,536			M 300	Brick. 1,500			116,000	95,500	27,827	28,663	4,000	4,000				
Shasta					M 300	Brick 1,500			2,310	2,541	800	1,400						
Sierra																		
Siskiyou																		
Solano					Tons 75	Pottery. 125	650	260			5,477	5,989	19,000	13,000	132	2,492		
Sonoma					M 250	Brick. 1,250	17,255	8,627					4,000	4,000	M 3,679	Paving Blks. 61,092		
Stanislaus																		
Tehama																		
Trinity																		
Tuolumne																		
Tulare							2,800	4,700			80	960						
Ventura			248,000	272,800													Cu. ft. 33,200	Sandstone. 20,000
Yolo																	Cu. ft. 252	Sandstone. 378
Yuba																		
Unapportioned (k)	500 tons.	Bit. Rock, $1,500 Nat Gas, 23,000			M 4,000	Brick. 20,000	50,000	50,000	50,000	40,000	5,000	5,000	150,000	100,000	Tons 30,000	Rubble. 20,000	Cu. ft. 20,000	Sandstone. 7,500
Totals		$596,547	1,257,780	$1,180,793		$615,890	185,261	$201,004	302,750	$261,505	68,184	$71,112	646,646	$510,245		$407,223		$93,293

Total value Hydrocarbons and Gases, $1,777,340. Total value Structural Materials, $2,160,272 00.

COUNTIES.	TOTAL PRODUCT OF COUNTIES. 1896. Value.	COUNTIES.	1895. Value.
Alameda	$230,630 00	Alameda	$274,647 00
Alpine	400 00	Alpine	
Amador	1,593,021 02	Amador	1,443,504 40
Butte	755,480 88	Butte	706,196 38
Calaveras	1,555,888 85	Calaveras	1,734,918 14
Colusa	14,584 00	Colusa	440 00
Contra Costa	138,109 00	Contra Costa	139,655 00
Del Norte	24,150 00	Del Norte	8,250 00
El Dorado	819,481 22	El Dorado	738,498 99
Fresno	85,884 60	Fresno	52,049 00
Humboldt	308,546 85	Humboldt	356,221 20
Inyo	497,626 48	Inyo	464,409 51
Kern	710,010 35	Kern	342,078 59
Lake	264,944 00	Lake	507,074 00
Lassen	40,300 00	Lassen	25,000 00
Los Angeles	1,072,738 55	Los Angeles	1,076,717 00
Madera	186,904 84	Madera	211,985 74
Marin	93,260 00	Marin	157,790 00
Mariposa	335,817 44	Mariposa	216,629 46
Mendocino		Mendocino	150 00
Merced	1,250 00	Merced	1,500 00
Mono	562,042 51	Mono	648,527 51
Monterey	1,000 00	Monterey	
Napa	495,366 00	Napa	489,200 00
Nevada	2,392,160 42	Nevada	1,795,391 16
Orange		Orange	4,144 00
Placer	1,735,750 55	Placer	1,677,527 32
Plumas	462,609 61	Plumas	603,222 57
Riverside	355,598 00	Riverside	378,155 00
Sacramento	189,268 00	Sacramento	211,497 75
San Benito	91,095 00	San Benito	104,250 00
San Bernardino	1,003,889 80	San Bernardino	1,114,863 30
San Diego	603,991 00	San Diego	386,407 57
San Francisco	322,667 00	San Francisco	379,696 00
San Joaquin	120,157 00	San Joaquin	102,800 00
San Luis Obispo	37,271 00	San Luis Obispo	81,320 00
San Mateo	2,500 00	San Mateo	5,000 00
Santa Barbara	383,159 00	Santa Barbara	158,078 00
Santa Clara	318,415 00	Santa Clara	445,950 00
Santa Cruz	239,199 00	Santa Cruz	254,776 00
Shasta	813,593 29	Shasta	811,233 52
Sierra	786,598 27	Sierra	694,576 63
Siskiyou	1,091,917 47	Siskiyou	1,030,983 73
Solano	23,413 00	Solano	24,285 00
Sonoma	135,146 00	Sonoma	177,840 00
Stanislaus	18,435 00	Stanislaus	30,081 50
Tehama	475 00	Tehama	11,525 00
Trinity	1,435,365 30	Trinity	1,305,412 41
Tuolumne	1,070,470 13	Tuolumne	667,066 77
Tulare	25,732 00	Tulare	18,820 00
Ventura	292,800 00	Ventura	264,624 00
Yolo	378 00	Yolo	1,873 00
Yuba	171,687 77	Yuba	111,482 34
Unapportioned (k)	380,200 00	Unapportioned (k)	395,340 00
Totals	$24,291,398 00	Totals	$22,844,664 29
	1896.		1895.

Tons are of 2,000 pounds. Spot values.
Counties not mentioned made no mineral production during 1896.
(a) Red Oxide of Iron.
(b) Ocher.
(c) Flasks of 76½ pounds.
(d) Value of that used commercially used.
(e) Natural Carbonic Acid Gas from a mine.
(f) Barrels of 42 gallons.

(g) Includes common, pressed, and fire.
(h) For smelting-flux, beet-sugar manufacture, and paving.
(i) For sea-wall construction by Government, railroad work, etc.
(j) So-called Basalt Blocks.
(k) Unapportioned includes product of single mines, etc., in counties, so as to conceal their identity; and also includes estimates of product of properties known to be working, but from which no returns were obtained.

MISCELLANEOUS TOTALS.—METALLIC.

Antimony	17 tons	$2,320 00
Chrome	786 tons	7,775 00
Copper (fine)	1,992,844 pounds	199,548 70
Lead	1,293,600 pounds	58,805 00
Manganese	318 tons	3,415 00
Mineral Paint	338 tons	5,540 00
Platinum	162 ounces	944 00
		$258,317 70

MISCELLANEOUS TOTALS.—NON-METALLIC.

Gypsum	1,310 tons	$12,580 00
Magnesite	1,500 tons	11,000 00
Soda	3,000 tons	65,000 00
		$88,580 00

TOTALS.—ASPHALTUM, BITUMINOUS ROCK, AND NATURAL GAS.

Asphaltum	20,414 tons	$302,500 00
Bituminous Rock	49,496 tons	122,940 00
Natural Gas		111,467 00
		$596,547 00

MISCELLANEOUS TOTALS.—STRUCTURAL MATERIALS.

Marble	7,889 cubic feet	$32,415 00
Onyx (California)	3,000 cubic feet	24,000 00
Paving Blocks	4,161 M	77,584 00
Rubble	343,973 tons	220,039 00
Sandstone	58,452 cubic feet	29,378 00
Serpentine	1,500 cubic feet	6,000 00
Slate	500 squares	2,500 00
		$500,516 00

TOTALS.—HYDRAULIC CEMENT AND CLAYS FOR BRICK, POTTERY, ETC.

Cement (Hydraulic)	9,500 barrels	$28,200 00
Brick	90,178 M	534,740 00
Pottery, Sewer-pipe, etc.	41,907 tons	62,950 00
		$625,890 00

Printed at the State Printing Office, Sacramento. A. J. JOHNSTON, Supt.

P3593